ICRS 2022 - Conference Secretariat University of Bremen Leobener Str. 6 (UFT), 28359 Bremen, Germany icrs2022.office@uni-bremen.de www.icrs2022.de

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Open call for action on equity and inclusiveness to the organisers of the 15th International Coral Reef Symposium in Bremen, Germany

My name is Elisa Bayraktarov and I have been a presenter and/or symposium organiser at every International Coral Reef Symposium (ICRS) since 2012 (Cairns 2012, Honolulu 2016, Bremen (virtual) 2021). I am writing this letter together with my colleague and co-chair Phanor Montoya Maya, Director of the environmental NGO, Corales de Paz, focused on mass coral reef restoration in Colombia.

For the ICRS20, international colleagues and I were scheduled to chair the symposium 13D 'Effectiveness of coral reef restoration – what have we learnt from the Caribbean and Eastern Tropical Pacific?'. This symposium aimed to share learnings from long-term and ongoing coral reef restoration projects done by scientists and practitioners in the Spanish-speaking parts of the Caribbean and Eastern Tropical Pacific, which have been poorly shared with the international scientific community. Uniquely, this was the first time in its 50-year history that the ICRS would have a session focused on overcoming language barriers and sharing coral reef research findings of restoration practitioners from the Caribbean and Eastern Tropical Pacific with the international community. As chairs of this symposium, we recommended the acceptance of 17 oral presentations and 2 posters, 16 of which were submitted from lower-middle-income countries such as Puerto Rico, Mexico, Bonaire, Curacao, and Colombia.

Traditionally, global biodiversity conservation meetings have required long-distance travel, registration fees and costly hotel expenses. These costs are a participation barrier for delegates from lower-middle-income countries. With the outbreak of the COVID-19 pandemic, many conferences changed from 'in-person' (physical) to 'online attendance' (virtual), while some conferences tested the 'hybrid' model between both types of attendance. The switch to virtual conferencing caused by COVID-19 offers a unique opportunity to enable access to a more diverse community, improving both equity and inclusiveness by removing cost-barriers associated with international travel and accommodation. Unfortunately, 2020-2021 virtual and hybrid events revealed that registration fees alone can still be a significant barrier to equity and inclusiveness. This was the case for ICRS21.

Due to the COVID-19 pandemic, the ICRS20 was postponed to 2021 (ICRS21) and took place as an entirely virtual conference hosted from Bremen, Germany which presented a unique opportunity for participants who would not normally be able to afford the traveling costs to join international meetings. Our symposium 13D went ahead as I chose to self-fund and chair it. Unfortunately, the ICRS21 virtual registration fees of 350 Euro (~413 USD) precluded almost all of the previously accepted delegates from lower-middle-income countries from presenting in this symposium (only one of the accepted delegates was able to register) and the knowledge my co-chairs and I intended to share with the world took a turn in a different direction. Looking at the bigger picture, the ICRS21 registration fee of \$413 USD represents 70% of the average

monthly wage among the five main Latin American countries with coral reefs (World Bank 2021). With this fee, the opportunity to overcome the communication barrier between researchers from rich countries and practitioners from lower-middle-income countries was lost.

This year, the ICRS Organising Committee has decided to host a hybrid conference in Bremen, Germany in July 2022 and automatically resubmitted all abstracts for presentations, posters or symposia that were accepted for the virtual ICRS21. Symposium chairs received a message to confirm whether their symposia (previously accepted for ICRS21) will reconvene in person in 2022 and were given until 07/01/2022 to respond – in midst of the uncertainty, COVID-19 chaos, and international border closures. One would hope that there would have been some lessons learnt from the comparably low participation at the virtual ICRS21 due to the high registration costs of 350 Euro (~413 USD), but instead the non-member registration costs for online participation have now been increased to 395 Euro (~448 USD). This is almost 80% of the average monthly wage of lower-middle income countries in the Caribbean and Eastern Tropical Pacific. The ICRS22 Organisers reassure that they are trying their best to keep the participation fees as low as possible and that there are huge costs that need to be covered, primarily by the participation fees in order to avoid deficits. And while they were involved in organising ICRS21 and ICRS22 on a voluntary basis and non-profit, to our knowledge there are no conversations around seeking sponsors to waive participation fees for delegates who can't afford 395 Euro (see Reef Futures 2022's approach here) or introducing a tiered approach which would enable participants from high-economy countries to sponsor those from lower-and middle-income countries – at least for the online participation. There are considerations to potentially offer options to non-presenting virtual participants closer to the event, however, the question here is how much value can be derived from a one-way knowledge transfer for the purpose of a scientific discourse.

We strongly believe that any scientific progress and solution-focused innovation requires the exchange of knowledge - both ways - and the inclusion of diverse perspectives. Conserving ecosystems, especially those found in lower-middle-income countries such as coral reefs, requires a consideration of scientific results, failures, and successes at the local field sites. Aligned with UN's Sustainable Development Goal 10 to "Reduce inequality within and among countries", to achieve positive conservation outcomes, we need to focus all our efforts on a more inclusive and equitable approach and strive to enable and empower delegates from lower-middle-income countries to attend international meetings while fostering the exchange of knowledge and collaboration.

We believe the 2018 Reef Futures conference held in the Florida Keys is a best practice example for fostering equity and inclusiveness. It was the first international conference with the aim of finding inclusive and feasible solutions to the decline of coral reefs. This conference convened an international community of 550 reef restoration scientists, practitioners, businesses, and civil organisations. Equity and inclusiveness were achieved by providing a large number of scholarships to scientists and practitioners from low- and middle-income countries financed by a multitude of sponsors that the organisers sought prior to the event (e.g., Paul G. Allen Family Foundation, XPRIZE, The Ocean Foundation and Iberostar Hotels & Resorts). At the Reef Futures conference in 2018, 23 scientists and practitioners from Spanish-speaking countries shared the scientific and practical knowledge from the implementation of their large-scale coral reef restoration projects. This exchange of knowledge produced a multi-author review of coral reef restoration efforts in Latin American countries and territories (Bayraktarov et al. 2020). The same consortium of authors submitted a session focused on the regional restoration efforts in

the Caribbean and Eastern Tropical Pacific to the ICRS20, but ultimately delegates never attended the ICRS20 (postponed to ICRS21) due to cost barriers. In 2022, the Reef Futures will convene once again; this time as a hybrid conference with its in person participation in Key Largo, USA. The Reef Futures conference continues setting the standards for fostering inclusion of equity and diversity at scientific meetings: the online participation is completely free to any participants and there are huge discounts in registration fees depending on the economic status of the country of delegate.

Here, we call on the ICRS Conference Organising Committee and the International Coral Reef Society for action to improve participation and access to the ICRS22, and future ICRS conferences, by strategically reducing cost barriers to delegates from lower-middle-income countries. We strongly believe that the change to a virtual dissemination of scientific results and exchange of knowledge brings along new opportunities to increase the participation of scientists from lower-middle-income countries in international meetings. Therefore, we challenge the ICRS to make science truly accessible by establishing scholarships and reducing registration costs to the ICRS in Germany (for virtual or physical participation) for lower-middle-income country delegates. Therefore, the physical participation fees must be kept below 20% of the average monthly wage in lower-middle income countries and virtual participation fees should be free altogether. If those delegates from lower-middle-income countries who were accepted to our symposium 13D and other symposia at the ICRS are given opportunities to participate through travel grants, scholarships, or at least waived fees for online participation, we are willing to self-fund our own expenses and participate as presenters and symposium chairs at the ICRS22 in Bremen, Germany. If the ICRS is not willing to promote equity and the inclusion of diversity of delegates from poorer countries, we will have to regrettably step down as both ICRS symposium chairs and presenters.

To halt global biodiversity decline, now more than ever, leading scientists and scientific societies must break the barriers to collaboration with lower-middle-income countries. We must foster more equity and inclusiveness to discover innovative solutions to our biodiversity crisis. We strongly believe that scientists from lower-middle-income countries play a critical role in developing major advancements in science. Therefore, it is paramount to enhance communication, cooperation, and collaboration with local researchers, civil environmental organisations, and local communities.

It is now time to take advantage of the transition the COVID-19 pandemic has initiated towards virtual and hybrid events by making scientific conferences and meetings viable for a more diverse range of participants. We must harness this opportunity to include scientists and practitioners, regardless of their country of origin.

Sincerely yours,

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